UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,560	06/30/2003	**Andrew J. Carroll**	020431.1292	5995

53184 7590 09/17/2009

i2 TECHNOLOGIES US, INC.
11701 LUNA ROAD
DALLAS, TX 75234

EXAMINER	
LEE, PHILIP C	

ART UNIT	PAPER NUMBER
2448	

NOTIFICATION DATE	DELIVERY MODE
09/17/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

candy_sanders@i2.com
steven@boothudall.com

Office Action Summary	Application No.	Applicant(s)	
	10/611,560	CARROLL ET AL.	
	Examiner	Art Unit	
	PHILIP C. LEE	2448	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 May 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *39-74* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *39-74* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

1. This action is responsive to the amendment and remarks filed on May 23, 2009.

2. Claims 39-74 are presented for examination and claims 1-38 are canceled.

3. The text of those sections of Title 35, U.S. code not included in this office action can be found in a prior office action.

Claim Rejections – 35 USC 102

4. Claims 39, 43-44, 46-47, 51, 55-56, 58-59, 63, 67-68 and 70-71 are rejected under 35 U.S.C. 102(e) as being anticipated by Jayaram et al, U.S. Patent 6,996,589 (hereinafter Jayaram).

5. Jayaram was cited in the previous office action.

6. As per claims 39, 51 and 63, Jayaram teaches the invention as claimed for providing bulk data transfers between one or more data stores (col. 11, lines 1-11), comprising:

a data integration server (combination of 220, 234, 235, 250, 260, 270 of fig. 2) coupled with the one or more data stores (col. 3, lines 33-52; col. 10, lines 56-63; col. 11, lines 1-11) (system with the database conversion engine connected to the source database and target database), the data integration server comprising:

a plurality of programmatic source interfaces (234, fig. 2, data filters with source extract format specification; col. 14, lines 20-22) coupled with one or more source data stores (connected for data transmission with the source data 225 of source system 320 as shown in fig. 2), wherein the plurality of programmatic source interfaces are defined according to a source interface specification (defined according to source extract format specification)(col. 11, lines 1-5) and are exposed during a bulk data transfer (abstract), one or more data entities are extracted from the one or more source data stores (data filters are accessible for use during bulk transfer to enable the system to receive/pull source data for loading into the target system)(col. 11, lines 5-11; col. 11, line 64-col. 12, line 10); and

a plurality of programmatic target interfaces (270, fig. 2, data upload process consists of tools such as SQL loader (sqlldr; col. 18, lines 56-61) with target scheme specification and mapping specification) coupled with one or more target data stores (data upload process coupled to the target system 310 as shown in fig. 2), wherein the plurality of programmatic target interfaces are defined according to a target interface specification (defined according to target scheme specification and mapping specification)(col. 11, lines 5-11) and are exposed during the bulk data transfer (abstract), one or more of the extracted data entities are loaded into the one or more target data stores (data upload accessible for use during bulk transfer to enable the system to upload the source data to the target system)(col. 11, lines 5-11; col. 12, lines 31-34).

7. As per claims 43, 55, and 67, Jayaram teaches the invention as claimed in claims 39, 51, and 63 above. Jayaram further teach loading data entities comprises inserting, updating, or deleting data entities (col. 11, lines 1-11) (uploading data must comprises inserting data into a target system).

8. As per claims 44, 56, and 68, Jayaram teaches the invention as claimed in claims 39, 51, and 63 above. Jayaram further teach define one or more resources within each of the plurality of programmatic source interfaces and the plurality of programmatic target interfaces which represent data entities within the one or more data stores (col. 14, lines 18-22) (data filter and data upload comprise source extract format specification, mapping specification and target scheme specification, representing the format of data); and in response to a request to execute a bulk data transfer involving one or more resources within the one or more data stores, (col. 10, lines 56-63) (instructions served to the system for executing of schedule conversion and uploading must include request to execute), create each of the plurality of programmatic source interface and the plurality of programmatic target interfaces within which at least one of the resources is defined (col. 14, lines 26-28) (in response to conversion, generate source extract format specification within which format is defined).

9. As per claims 46, 58, and 70, Jayaram teaches the invention as claimed in claims 44, 56, and 68 above. Jayaram further teach the plurality of programmatic source interfaces and the plurality of programmatic target interfaces are defined within each session interface (col. 16, lines 24-26); each session interface isolates from a defined programmatic source interface and

programmatic target interface details associated with export and import of resources involved in a bulk data transfer (col. 16, lines 26-52); and the data integration server is further configured to, in connection with creating the plurality of programmatic source interfaces and the plurality of programmatic target interfaces, create each session interface within which at least one of the plurality of programmatic source interfaces and the plurality of programmatic target interfaces is defined (col. 16, lines 21-26).

10. As per claims 47, 59, and 71, Jayaram teaches the invention as claimed in claims 46, 58, and 70 above. Jayaram further teach session interface persists, once created, either for the entirety of the bulk data transfer or for the entirety of multiple data transfers according to its definition (col. 16, lines 22-52).

Claim Rejections – 35 USC 103

11. Claims 48-50, 60-62 and 72-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jayaram.

12. As per claims 48, 60, and 72, although Jayaram teaches allow each of the plurality of programmatic source interfaces and the plurality of programmatic target interfaces to produce or consume data entities in a desired format (col. 11, line 57-col. 12, line 22); convert data entities produced in a first format particular to a programmatic source interface to a second format particular to a programmatic target interface (col. 5, lines 50-63), however, Jayaram does not

teach convert only if necessary because the first and second formats are different. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to include conversion of data only if the first and second formats are different in order to avoid inefficient process of conversion between data stores of the same format.

13. As per claims 49, 61, and 73, although Jayaram teaches one or more programmatic interfaces, each programmatic interface being coupled with a corresponding data store and exposed within the data integration server during a bulk data transfer to enable the data integration server to read data entities directly from and write data entities directly to the one or more relational data stores during the bulk data transfer, however, Jayaram does not teach relational interfaces. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to include relational interface as alternative of the plurality of programmatic source interfaces and the plurality of programmatic target interfaces during the bulk data transfer without using the plurality of programmatic source interfaces or the plurality of programmatic target interfaces because by doing so it would allow backup interface for performing the functions of the programmatic interfaces in case of failure in the programmatic interface, thus providing alternative interface without using the programmatic interface.

14. As per claims 50, 62, and 74, Jayaram teaches the invention as claimed in claims 49, 61, and 73 above. Jayaram further teach an interface schema file providing a database-neutral description of a physical database schema of the corresponding relational data store (col. 2, liens 39-55); and an interface mapping file providing a logical-to-physical mapping for all data entities

defined for the relational interface to enable the data integration server to execute bulk data transfers between relational data stores having different physical database schema (col. 16, lines 22-41).

15. Claims 45, 57, and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jayaram in view of Jennyc et al, U.S. Patent 6,334,158 (hereinafter Jennyc).

16. Jennyc was cited in the previous office action.

17. As per claims 45, 57, and 69, although Jayaram teach programmatic interface persist, once created for the entirety of the bulk data transfer and for the single step of the bulk data transfer (col. 11, lines 1-11), however, Jayaram does not teach release of interface. Jennyc teaches programmatic interface persists, once created: if a programmatic source interface, for the data transfer before resources of the programmatic source interface are released (col. 20, line 65-col. 21, line 5); and if a programmatic target interface, for the data transfer before resources of the programmatic target interface are released (col. 20, line 65-col. 21, line 5).

18. Because both Jayaram and Jennyc teach similar method of interfacing systems for data transfer, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to use known technique of release of interface of Jennyc's system to improve similar method of interfacing systems for data transfer in Jayaram's system in the same

way. By using the known technique of release of interface, it would allow Jayaram's system to allocate the released resources to other processes.

19. Claims 40, 52, and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jayaram in view of Shannon et al, U.S. Patent Application Publication 2002/0046301 (hereinafter Shannon).

20. Shannon was cited in the previous office action.

21. As per claims 40, 52, and 64, Jayaram does not teach Java interfaces. Shannon teaches Java interfaces ([0031] and claim 5).

22. Because both Jayaram and Shannon teach similar method of interfacing systems for data transfer, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to use known technique of JAVA interface of Shannon's system to improve similar method of interfacing systems for data transfer in Jayaram's system in the same way. By using the known technique of JAVA interface, it would allow Jayaram's system to map transferred data between the systems.

23. Claims 41-42, 53-54, and 65-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jayaram in view of Casagrande et al, U.S. Patent 6,381,709 (hereinafter Casagrande).

24. Casagrande was cited in the previous office action.

25. As per claims 41, 53, and 65, Jayaram teaches the invention as claimed in claims 39, 51 and 63 above. Although Jayaram teaches the plurality of programmatic source interfaces and the plurality of programmatic target interfaces are exposed supporting bulk data transfers (col. 11, lines 1-5; col. 11, lines 1-11), however, Jayaram does not teach industry standard interface and industry standard protocol. Casagrande teaches an interface supporting data transfer according to an industry standard protocol (fig. 4, col. 8, lines 60-67).

26. Because both Jayaram and Casagrande teach similar method of interfacing systems for data transfer, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to use known technique of FTP interface of transferring data in Casagrande's system to improve similar method of interfacing systems for data transfer in Jayaram's system in the same way. By using the known technique of FTP interface, it would allow Jayaram's system to exchange data between systems on a network.

27.

28. As per claims 42, 54 and 66, Jayaram and Casagrande teach the invention substantially as claimed in claims 41, 53 and 65 above. Although Jayaram teaches receive a request from a client indicating that the client is extracting data from one or more source data stores and loading data into one or more target data stores (col. 13, lines 14-48); create a plurality of programmatic source interfaces to enable extraction of the data from the one or more source data stores (col.

13, lines 14-48; col. 13, lines 49-63; col. 14, lines 25-28); create a plurality of programmatic target interface to enable loading of the data into the one or more target data stores (col. 18, lines 56-61); for data extraction, as the plurality of programmatic source interface produce the data extracted from the one or more source data stores, send the outgoing data to a client (col. 10, line 64-col. 11, line 15); and for data loading, as the data arrives from the client, send the incoming data to the plurality of programmatic target interfaces for loading into the one or more target data stores (col. 10, line 64-col. 11, line 15), however, Jayaram does not teach industry standard protocol. Casagrande teaches an interface supporting data transfer according to an industry standard protocol (fig. 4, col. 8, lines 60-67).

29. Because both Jayaram and Casagrande teach similar method of interfacing systems for data transfer, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to use known technique of FTP interface of transferring data in Casagrande's system to improve similar method of interfacing systems for data transfer in Jayaram's system in the same way. By using the known technique of FTP interface, it would allow Jayaram's system to exchange data between systems on a network.

30. Although Jayaram teaches for data extraction, as the plurality of programmatic source interface produce the data extracted from the on or more source data stores, sending the outgoing data to a client (e.g., target database as the client receiving the source data)however, Jayaram and Casagrande do not specifically teach sending the outgoing data to *the* client. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to include

sending the source data to any client (i.e., to send data from source to target or from target to source) because by doing so it would allow data transfer between any source to any client.

31. Applicant's arguments with respect to claims 39-74, filed 05/23/09, have been fully considered but they are not persuasive.

32. In the remark, applicant argued that:

> (1) Jayaram fails to teach data integration server coupled to one or more data stores and the data integration server comprising a plurality of programmatic source interfaces coupled with one or more source data stores, wherein the plurality of programmatic source interfaces are defined according to a source interface specification and are exposed during a bulk data transfer, one or more data entities are extracted from the one or more source data stores and a programmatic target interfaces.
>
> (2) Jayaram fails to teach data integration server coupled to one or more data stores and the data integration server comprising a plurality of programmatic target interfaces coupled with one or more target data stores, wherein the plurality of programmatic target interfaces are defined according to a target interface specification and are exposed during a bulk data transfer, one or more data entities are loaded into the one or more target data stores.

33. In response to points (1) and (2), the rejection set forth above provide more concise explanation for the claim limitation. Hence, applicant argument is moot in view of the concise explanation set forth above.

34. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip C Lee whose telephone number is (571)272-3967. The examiner can normally be reached on 8 AM TO 5:30 PM Monday to Thursday and every other Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on (571) 272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR

or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Philip C Lee/

Primary Examiner, Art Unit 2448